

Draft Environmental Assessment



LEWIS and CLARK CAVERNS STATE PARK Amendment to Park Management Plan

October 2007



***Montana Fish,
Wildlife & Parks***

**Lewis and Clark Caverns State Park
Amendment to Park Management Plan
Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST**

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** Montana Fish, Wildlife & Parks (FWP) proposes to amend the 2000 Lewis and Clark Caverns State Park Management Plan to allow trail development in the undeveloped section of the Park, mountain bike riding in some areas of the Park, and upgrading overnight facilities in the Park campground.
2. **Agency authority for the proposed action:** The 1939 Montana State Legislature passed MCA 23-1-101 which states that a State Park System would be established “for the purpose of conserving the scenic, historic, archaeological, scientific, and recreational resources of the state and providing for their use and enjoyment, thereby contributing to the cultural, recreational, and economic life of the people and their health”. Montana Section 23-1-102 (4) MCA gives FWP “jurisdiction, custody, and control of all state parks, recreational areas, public camping grounds, historical sites, and monuments”.
3. **Name of project:** Lewis and Clark Caverns State Park Amendment to Park Management Plan
4. **Name, address and phone number of project sponsor (if other than the agency):** Montana Fish, Wildlife, & Parks is the project sponsor.
5. **Project Timeline:**
Estimated Commencement Date: Summer 2007
Estimated Completion Date: NA
Current Status of Project Design (% complete): 50
6. **Location affected by proposed action (county, range and township):**
Lewis and Clark Caverns State Park is located in Jefferson County in T01N, R02W, sections 16, 17, and 18.



Figure 1. Area map of Lewis and Clark Caverns State Park.

7. **Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>	(e) Productive:	
Industrial	<u>0</u>	Irrigated cropland	<u>0</u>
(b) Open Space/Woodlands/Recreation	<u>2034</u>	Dry cropland	<u>0</u>
(c) Wetlands/Riparian Areas	<u>0</u>	Forestry	<u>0</u>
		Rangeland	<u>0</u>
		Other	<u>0</u>

8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) **Permits:** permits will be filed at least 2 weeks prior to project start.

<u>Agency Name</u>	<u>Permit</u>
N/A	

(b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
N/A	

(c) **Other Overlapping or Additional Jurisdictional Responsibilities:**

<u>Agency Name</u>	<u>Type of Responsibility</u>
N/A	

8. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

Lewis and Clark Caverns State Park is located in southwest Montana in Jefferson County (see Figs. 1 and 3) within FWP Region 3. Lewis and Clark Caverns was Montana's first state park and continues to be a very popular destination, attracting over 70,000 visitors a year mostly in the summer months. Visitors climb a winding access road to over 5000 ft. which provides visitors with spectacular views of the Lower Jefferson River Valley and the undeveloped sections of the Park (see Fig. 2). The main attraction of the Park is a two-hour guided cave tour within the caverns themselves where visitors can observe natural cave formations such as stalactites, stalagmites, columns, and helictites, learn about cave ecology, and hear about the history of the Lewis and Clark Expedition and other early exploration. The Park also offers a visitor center, an amphitheater, several picnic areas, a large campground, showers, RV dump facilities, a tipi, three rental cabins, and several miles of hiking trails. Many visitors use the Park as a base while exploring the Lower Jefferson River Valley.



Figure 2. Scenic view of the Jefferson River Valley as seen from Lewis and Clark Caverns State Park.

In August 2000, FWP staff developed a management plan for the park which directs the provision of visitor services; the management and protection of natural, cultural, historic, and recreational resources; and the development of all associated facilities and programs for a 10-year period. The Park Management Plan (PMP) guides the day-to-day operation of the park and serves as the basis for management decisions and actions but is meant to be a working, dynamic document that can be amended if circumstances change.

LEWIS AND CLARK CAVERNS STATE PARK

Figure 3. Site map of Lewis and Clark Caverns State Park.

Developed areas of the Park. See Figure 4 for detailed map.

Primitive area of the Park covers western half of Park.

Semi-developed areas cover remainder of Park

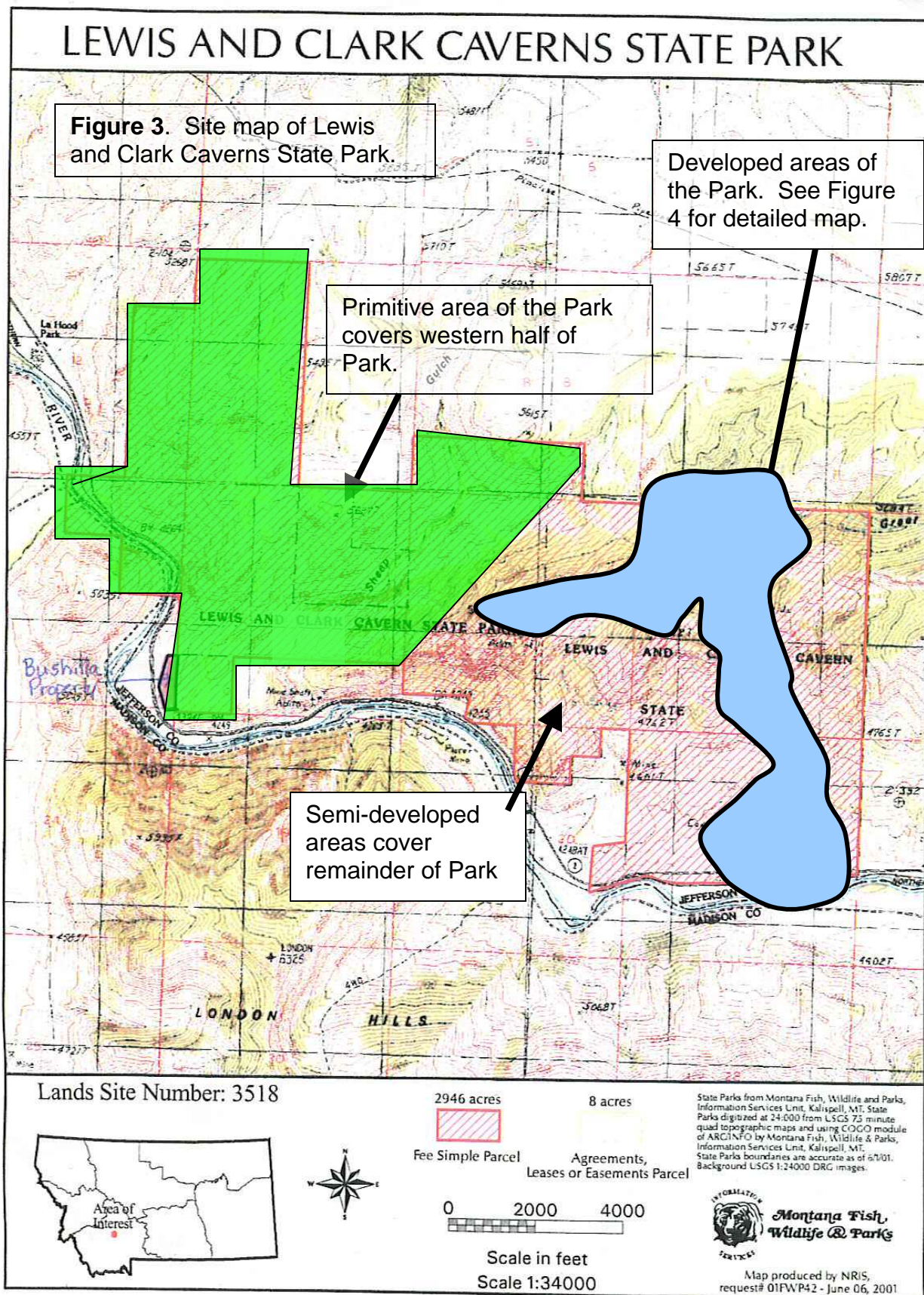
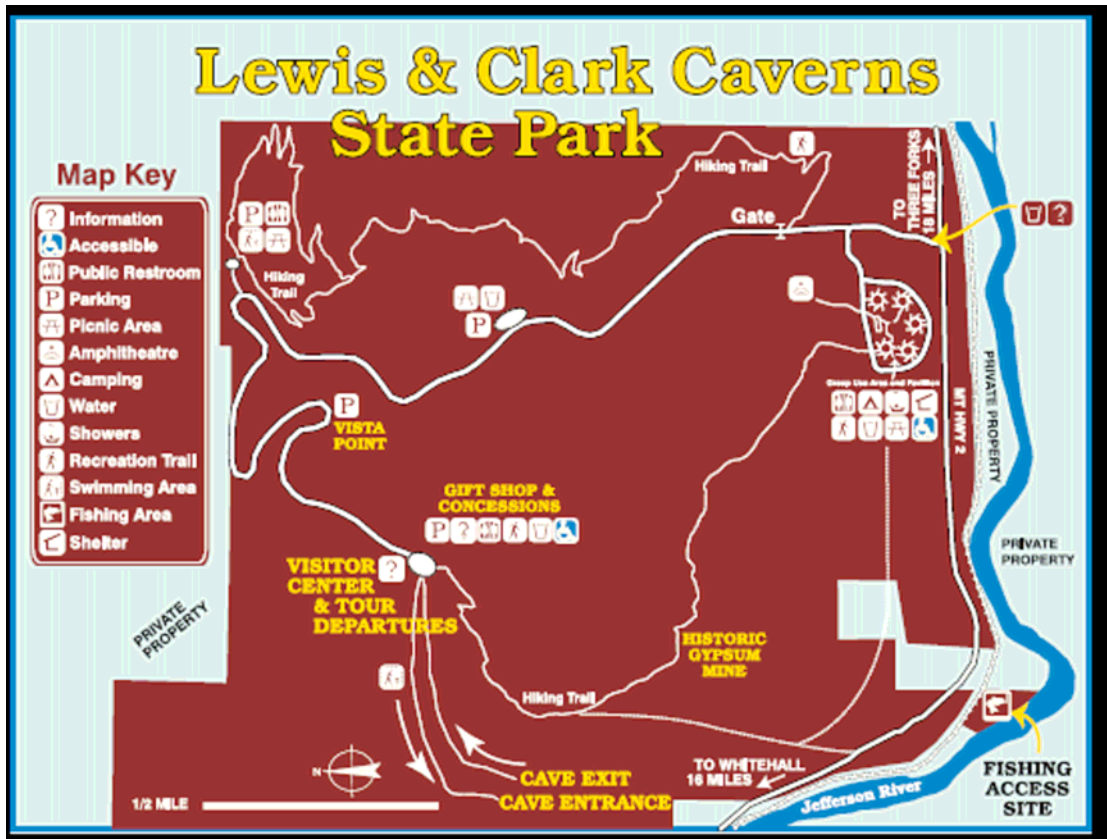


Figure 4. Map of roads and amenities at Lewis and Clark Caverns State Park. Notice the change in map orientation.



Over the last several years, Park managers have become aware of three management issues in which the current or proposed future management of the Park does not correspond to guidelines outlined in the PMP and have called for an amendment to the PMP. These issues are 1) trail development in the “primitive” area of the Park 2) mountain bike use on trails within the Park and 3) electrical and water hook-ups for RV users in the Park campground. These issues will be discussed separately.

Trail Development

Lewis and Clark Caverns State Park (LCCSP) encompasses 3034 acres. Because of the large size of the Park, the current Park Management Plan (PMP) implemented the concept of management zones within the Park which include the developed zone (approx. 500 acres), the semi-developed zone (approximately 1000 acres), and the primitive zone (approx. 1500 acres) (see Fig. 3). All of the Park’s highly developed areas such as roads, parking areas, visitor’s center, picnic areas, campgrounds, etc. are concentrated in the developed zone as well as portions of the trails (see Fig. 4), while the semi-developed zone contains the remainder of the trails and serves as a buffer between the developed and primitive zones. The primitive zone covers the western half of the Park and, aside from some old jeep trails and pioneered footpaths, is undeveloped.

The zones were established to guide management strategies and communicate to visitors what activities, services, and access is available in different parts of the Park. As such, the zones are more descriptions rather than designations. Visitors to the developed zone can expect easy access, regular maintenance, interpretive signs, regular contact with Park staff, and concessionaire services. In contrast, visitors to the primitive zone can expect a near-wilderness experience with difficult access, no amenities, and infrequent contact with Park staff or other visitors.

The issue of trail development in the primitive zones of the park is not clearly defined in the current PMP. On the one hand, future trail routes within the primitive zone are shown on maps in the PMP (see PMP Fig. 9, page 57), and on page 51 the plan states that “this zone would contain a limited number of maintained hiking trails.” The PMP apparently then contradicts itself by stating on pages 6 and 55 that “the preferred option calls for developing all potential trail routes within the developed and semi-developed management zones in the Park.” As there had been high public support for an expanded trail system, especially in the western portion of the Park, and trails do not necessarily compromise primitive areas, it is possible that this portion of the PMP contained erroneous information.

This amendment seeks to clarify this issue by confirming that trail development within the primitive zone is a high priority among visitors and is consistent with management principles set forth in the mission statement and 10-year vision of LCCSP (see Appendix C) and will be pursued.

Historically, hiking and nature studies have drawn a significant number of visitors to the Park. During the development of the Park’s 10-year management plan, public input regarding trail development was sought through visitor surveys and comments. Based upon the input received, there appeared to be a high level of support for an expanded trail system, especially in the non-developed western portion of the Park’s property. The addition of a trail network in this part of the Park would offer new hiking opportunities into seldom-used areas of the Park, broaden the scope of the interpretation program, and allow more natural variety with differing degrees of hiking trail length and gradient.

Mountain Bike Use

The current PMP (pages 7 and 56) states that “allowing off-road mountain biking in the Park is not a recommendation in this Plan; however, there may be future opportunities for this type of trail use on a very limited basis”. Since the PMP was written, mountain bikes have become an increasingly common sight on trails in the Park. While mountain bike use has not been actively encouraged, it has not been discouraged either even though bike use is clearly beyond the “very limited basis” referred to in the PMP.

Mountain biking has become the predominate use of the Park’s trail system, especially in the ‘shoulder’ seasons that extend from October to May. During these months, bicycling accounts for approximately 90% of trail use in the Park with hiking making up the other 10%. In the summer months of June, July, and August, those

numbers are reversed. This division of use occurs naturally because bicyclists are drawn to the Park at those times because the Park is snow-free earlier than many other trails in the area and they rarely have to share the trail with hikers. During the summer, bicyclists opt for higher-elevation trails as they are finally clear of snow and have far fewer hikers than Park trails on a typical busy summer day.

While allowing both mountain biking and hiking on the same trails can lead to user conflict and safety issues, LCCSP has heard very few complaints from trail system users. This can largely be explained by the use pattern and possibly by a heightened level of trail etiquette that area riders appear to display on Park trails. The Gallatin Valley Bicycle Club has offered to help draft a bicycle safety code for the Park if mountain biking is going to be continued to be allowed at the Park in order to improve safety for all users.

Another concern regarding mountain bike use in the Park includes trail maintenance. In general, trails in the Park are fairly well suited to mountain bike use as soils in the Park are not highly erosive and the trails are well-drained (see Fig. 5). These conditions help resist the formation of a center rut and help avoid trail and vegetation damage on switchbacks. However, mountain bike use does require more trail maintenance than hiking alone, even under the best of conditions. Area bicyclists seem to have recognized this fact as Park staff have received close to a dozen written offers from individuals offering to help with trail maintenance. The Gallatin Valley Bicycle Club has also offered to help organize an annual trail maintenance day as well as offer their expertise in the latest sustainable and safe trail building practices which would ultimately result in lower maintenance costs and improved safety.

The Park is ultimately interested in meeting the public's demands and needs, and since there appears to be a strong demand for mountain bike use on LCCSP trails, FWP is proposing to amend the PMP to formally allow for mountain bike use.



Figure 5. Cave Gulch Trail.

Campground Hook-ups and Other Upgrades

One of the central tenets of the ten-year vision plan for LCCSP (see Appendix 2) is to focus on providing quality visitor services and increase the Park's importance as a destination tourist attraction. This goal was going to be achieved by enhancing the visitor experience and expanding non-motorized recreational opportunities while still maintaining the rustic character of the Park's facilities.

Park managers have followed this plan and implemented many new services (such as a recent upgrade of the lighting system in the caverns) and programs, but it is becoming clear that all of these peripheral efforts will be largely unsuccessful in attracting more visitors unless the campground is updated and some electrical and/or water hookups are provided which is not mandated by the current PMP.

Recent surveys conducted by the Park indicate that the range of services available at the campground is not adequate and a major factor in influencing whether people decided to stay overnight. It can safely be assumed that the same issues are keeping many potential visitors from coming to the Park at all. When the current management plan was written, much of the data used to drive the plan was gathered in the early to mid 1990's, and some of that information, particularly demographical data, is no longer relevant. For example, 61% of the visitors to LCCSP in 2006 were age 55 or older. That is a substantial shift toward older visitors than occurred even a decade ago. Planners envisioned an increase in the number of older tourists, but not to such a great extent. Park managers are also seeing a marked increase in the obesity and general poor health of visitors, all of which influence management decisions.

One of the biggest effects of the trend towards older tourists is that RV-based "camping" is fast outstripping tent camping. Park staff attest that every year there are fewer tent campers in the campground and more RV drivers. Currently, approximately 65% of all campground users in LCCSP drive RVs. When these RV drivers visit the Park and inquire about campground accommodations, many choose not to stay when informed that there are no hook-ups in the campground. Among those who do stay, almost all complain about the absence of hook-ups and ask when they might be installed. Additionally, many potential visitors who phone the Park to get information about campground accommodations decide not to visit the Park upon learning of the lack of hook-ups. An attendant issue is that many of these older visitors require supplementary oxygen, and as generators are not allowed to run past 10pm in observation of quiet hours, the issue becomes health-related instead of comfort-related.

In light of these facts, FWP is proposing to amend the current Lewis and Clark Caverns PMP to allow for improvements to be implemented at the campground including upgrades to the current facilities and installation of utility hook-ups. Originally, Park managers had decided not to provide such services in order not to compete with neighboring private campgrounds and to keep the campground "rustic" (see Figs. 6 and 7). However as time has elapsed, it has become evident that fewer

visitors desire a rustic camping experience and the vast majority want an upgraded campground with a wide range of services.

While an upgraded Park campground might result in some competition with other area campgrounds, the product of each would remain unique and would continue to serve a distinct clientele. Any changes to the Park that result in higher visitation would ultimately bring in more revenue for all local businesses. However while LCCSP can no longer promise not to upgrade the campground facilities, it is FWP's policy to attempt not to compete with area businesses. FWP has developed a statewide price structure for campground accommodations that reflects that. In discussions with campground owners, the real root of their dislike of government campgrounds is not based on the facilities provided as much as on the price charged for those facilities. By charging market rates for upgraded services at the campground, Park managers hope to maintain a positive relationship with area business owners.



Figure 6. Campground at LCCSP.

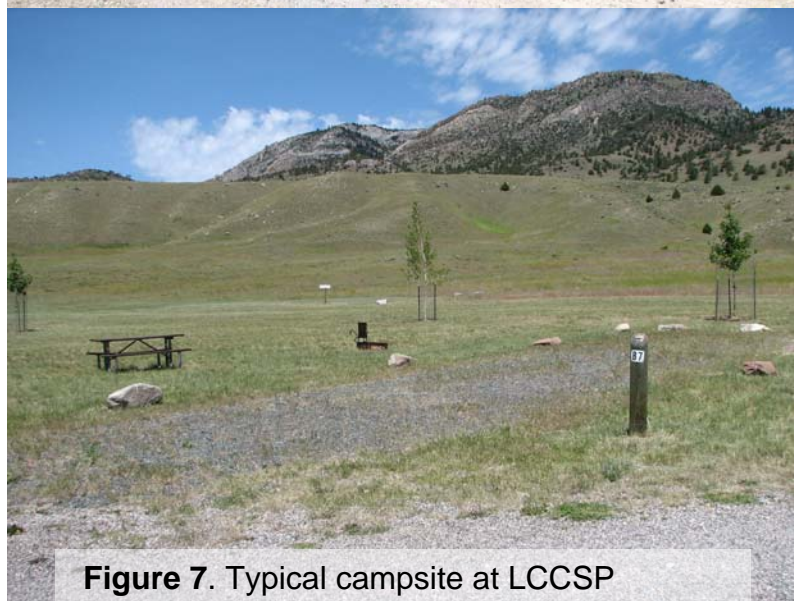


Figure 7. Typical campsite at LCCSP

PART II. ENVIRONMENTAL REVIEW

1. **Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:**

Alternative A: No Action

Trail Development

If no action is taken, the issue of trail development in the Park's primitive zone would not be clarified and any proposals of new trail construction within the primitive zone would likely be contested. Therefore, until this issue is resolved, no plans for new trails would be proposed, and opportunities to increase the recreational value of this Park would be bypassed.

Mountain Bike Use

If no action is taken, mountain bike use in the Park would not be allowed. By not allowing mountain bike use in LCCSP, FWP would lose an opportunity to develop a partnership with local mountain bicyclists to help create a sustainable trail network and would also lose an opportunity to reach out to a demographic that has been hard to bring into state parks—young adults.

Campground Development

If no action is taken, utility hook-ups and other major upgrades to the campground would not be undertaken. The campground would retain its rustic feel which would appeal to some users but not others. Park staff would continue to field many complaints about the lack of services at the campground, and occupancy of the campground would continue to be low.

Alternative B: Proposed Action

Note: a detailed evaluation of the Proposed Action is included in Part VI.

Trail Development

In the preferred Alternative, the Lewis and Clark Caverns State Park Management Plan, pages 6 and 55, would be amended to read *"There is potential for developing additional trails in the Park. In the 1950s and early 1960s, a series of jeep trails were constructed throughout the Park as fire breaks. These narrow roads were never maintained, but many are still clearly evident today. Some old roads would function very well as trails, requiring for the most part only minor modifications and the placement of information and direction signs. The majority of the proposed new trails would follow these existing roads. The preferred option calls for increasing Park trail opportunities within all three zones of the Park, utilizing the aforementioned jeep trails when possible in order to minimize impacts and keep costs low."*

Visitor surveys and public meetings conducted as part of the management planning process routinely show that a bigger network of trails in the Park is a high priority for visitors.

Mountain Bike Use

In the Preferred Alternative, the Lewis and Clark Caverns State Park Management Plan, pages 7 and 56, Issue 2: Trail Use, would be amended to read *“This issue concerns the types of use that will be allowed on new or existing trails in the Park. Mountain bikes will be allowed on most Park trails year-round at the discretion of Park management. Mountain bikes will be prohibited on the Nature Trail Loop and the Greer Gulch Loop Trail due to heavy use by pedestrians. Bicycles will be permitted on Park roads. The current trail system would not be adequate for horseback riding; horses on Park roads could create safety concerns and conflicts with vehicles, and therefore will not be allowed. Motorized trail use of any type will also not be permitted. Opportunities for providing disabled access trails or trail segments will be examined.”*

This Alternative is preferred because it allows visitors to use the trails according to their needs. If use patterns continue as they have in the last several years, hikers and bicyclists would continue to naturally stagger their peak usage times and conflicts would remain low. Shared use trails are the most efficient use of agency resources and help build a larger community of park supporters. The two trails most frequented by hikers (the Greer Gulch Trail and the Nature Loop) would be permanently closed to bicyclists, but most of the other trails would be open year-round to bikers so no visitors are turned away disappointed. This Alternative would also allow Park staff some flexibility in determining to close off other trails to bicyclists if conditions change in the future.

Campground Development

In the preferred Alternative, the Lewis and Clark Caverns State Park Management Plan, page 6, section 9. Private Sector Support—would be amended to read *“An emphasis will be placed on developing and enhancing positive relationships with private businesses and neighboring landowners on issues such as marketing and advertising, promoting special events, and weed control. Park management reserves the right to implement upgrades to overnight camping facilities in the Park but will make every effort to cooperate with rather than compete with area businesses.”*

This is the preferred Alternative because it will allow the Park to implement upgrades to the campground while maintaining a good relationship with local businesses. By installing some utility hook-ups and possibly other improvements, LCCSP would be recognizing the needs and requests of many of its users, especially people aged 55 and over who now account for 61% of all visitors to the Park. An upgraded campground would also attract more visitors to the Park and larger area which would support the Park’s Mission Statement and ultimately benefit local businesses.

Alternative C:

Trail Development

There is no additional Alternative proposed in this EA for this issue.

Mountain Bike Use in the Park

In the preferred Alternative, the Lewis and Clark Caverns State Park Management Plan, page 56, Issue 2, would be amended to read *“This issue concerns the types of use that will be allowed on new or existing trails in the Park. Mountain bikes will be allowed on specific trails within the Park October 1-May 30. Mountain bikes will be prohibited on the Nature Trail Loop and the Greer Gulch Loop Trail due to heavy use by pedestrians. Bicycles will be permitted on Park roads. The current trail system would not be adequate for horseback riding; horses on Park roads could create safety concerns and conflicts with vehicles, and therefore will not be allowed. Motorized trail use of any type will also not be permitted. Opportunities for providing disabled access trails or trail segments will be examined.”*

This Alternative would be acceptable but not preferred because it demands a higher level of enforcement from Park staff who are already very busy, and it relies on arbitrary dates that may not accurately reflect actual recreational needs. For example, snows may come in early October one fall, forcing bicyclists off higher elevation trails, but they would be prohibited from using Park trails for another month, even though the same cold weather that brought the snow would also shorten the busy season at the Park and leave the trails virtually empty of hikers. Also, visitors to the Park who wish to use their bicycle may not be aware of the seasonal closure and would be disappointed.

Campground Development

There is no additional Alternative proposed in this EA for this issue.

Alternative D:

Trail Development

There is no additional Alternative proposed in this EA for this issue.

Mountain Bike Use in the Park

In the preferred Alternative, the Lewis and Clark Caverns State Park Management Plan, page 56, Issue 2, would be amended to read *“This issue concerns the types of use that will be allowed on new or existing trails in the Park. Trails would be designated either mountain biking only or hiking only. Mountain bikes will be prohibited on the Nature Trail Loop and the Greer Gulch Loop Trail due to heavy use by pedestrians. Bicycles will be permitted on Park roads. The current trail system would not be adequate for horseback riding; horses on Park roads could create safety concerns and conflicts with vehicles, and therefore will not be allowed. Motorized trail use of any type will also not be permitted. Opportunities for providing disabled access trails or trail segments will be examined.”*

The negative aspects of this Alternative is that it requires additional enforcement from Park staff, certain areas of the Park would be off-limits to one user or the other, and dividing trails up in this manner ultimately requires more time and money for development and maintenance from the Park's limited budget. Shared-use trails are the most efficient use of agency resources and help build a larger community of Park supporters. The positive aspects of the Alternative is that there would be virtually no conflicts between the groups as they would rarely have any interaction, hikers could be

assured of a quiet wilderness experience on a well-maintained trail, and bikers would be assured of an open trail year-round.

Campground Development

There is no additional Alternative proposed in this EA for this issue.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

There are no formal stipulations of mitigation or other controls associated with the proposed action. This action does not involve any permits or granting of a license on which stipulations would be placed.

PART III. ENVIRONMENTAL REVIEW CHECKLIST

1. Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		X	1b.
c. **Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):

- 1b. Under the Preferred Alternative, the expected outcome(s) of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. All of these projects would result in minor disruption, displacement, erosion, etc. of soil, but overall the effects would be minor and could be mitigated by the adherence to Best Management Practices, or BMPs. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

2. <u>AIR</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			X		yes	2a.
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)						
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):

- 2a. Under the preferred Alternative, the expected outcome of the Park Management Plan Amendment includes the installation of utility hook-ups and other upgrades in the campground. Such development would likely require the use of heavy machinery which emit air pollutants, but overall the effects would be minor and could be mitigated by the adherence to Best Management Practices, or BMPs. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

3. WATER Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X			3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. ****For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)						
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)						
n. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):

3. Under the preferred Alternative, the expected outcome of the Park Management Plan Amendment include the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. Specifics are not available at this time, but these projects, particularly the campground upgrades, may have a minor impact on water resources in the park. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

3a. Please see Comment 3.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

4. VEGETATION Will the proposed action result in?	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				4a.
b. Alteration of a plant community?		X				4b.
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				4c.
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				4e.
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?						
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):4a.

4. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. All of these projects would likely result in minor impacts to the plant community in the Park. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

4a. Please see comment 4.

4b. Please see comment 4.

4c. No threatened or endangered plants are found within Lewis and Clark Caverns State Park.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)						
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)						
j. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife (attach additional pages of narrative if needed):

5a. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. Some or all of these projects might result in minor impacts to animal species in the Park. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

5f. A search of the Montana Natural Heritage Database did not reveal any documented occurrences of threatened or endangered species of wildlife in the proposed project area. Four wildlife species of concern were identified, but it is unlikely they would be affected by any of the management changes discussed in this EA amendment. Please see Appendix 1 for a more complete discussion of species of concern within the project area.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):

6. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. It is unlikely that any of these projects would cause an appreciable increase in noise in the Park. The proposed installation of utility hook-ups in the campground would actually cause a decrease in noise, as RV users would not be forced to run their generators any more. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):

7. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. It is unlikely that any of these management changes would affect land use in the area. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)						
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):

8. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. Implementing campground improvements would likely increase human health and safety in the Park, as sanitation would be improved, and electricity would be available for those visitors who rely on supplementary oxygen.

The development of new trails and increased mountain bike use in the Park could create minor risks and health hazards to people, mainly in the form of collisions between bicyclists and inanimate objects, collisions between bicyclists and hikers, and exposure of hikers and bicyclists to more encounters with wild animals, especially rattlesnakes. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?			X			9d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):

9. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. All of these projects would be likely to cause an increase in visitation to the Park and surrounding area, which would cause an increase in economic activity for many local businesses. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

9d. Please see Comment 9.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:			X			10a.
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?			X			10c.
d. Will the proposed action result in increased use of any energy source?			X			10d.
e. **Define projected revenue sources						10e.
f. **Define projected maintenance costs.						10f.
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities (attach additional pages of narrative if needed):

10. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would include the eventual installation of utility hook-ups and other upgrades in the campground. Any future development referred to in this amendment would be analyzed in a separate EA and specific impacts would be discussed more thoroughly at that time.
- 10a. If the Park Management Plan Amendment is accepted, it is likely that utility hook-ups would be added to the Park campground, which would affect the water supply to the Park. Please also see Comment 10.
- 10c. If the Park Management Plan Amendment is accepted, it is likely that utility hook-ups would be added to the Park campground, which would require new electrical facilities in the Park. Please also see Comment 10.
- 10e. Accurate costs for the various projects discussed in this EA amendment are not available at this time. If this EA amendment is accepted, a separate EA would be produced prior to the implementation of any of these projects, in which specific costs would be discussed.
- 10f. Accurate maintenance costs for the various projects discussed in this EA amendment are not available at this time. If this EA amendment is accepted, a separate EA would be produced prior to the implementation of any of these projects, in which specific maintenance costs would be discussed.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

** 11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X			11c.
d. *** <u>For P-R/D-J</u> , will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)						
e. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):

- 11c. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. All of these projects would be likely to increase visitation to the Park and increase enjoyment and use of the Park. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)						
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (attach additional pages of narrative if needed):

12. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. It is unlikely that any of these projects would impact cultural or historical resources in the Park. Any future trail development and campground upgrades referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u> Will the proposed action, considered as a whole:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)						
g. ****For P-R/D-J, list any federal or state permits required.						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):

13. Under the preferred Alternative, the probable outcome of the Park Management Plan Amendment would be the eventual development of new trails in the Park, additional mountain bike use in the Park, and the installation of utility hook-ups and other upgrades in the campground. Any future development referred to in this amendment would be analyzed in a separate EA and specific impacts would be discussed more thoroughly at that time. However, it is unlikely that any of the management changes or projects discussed in this EA amendment could cause significant impacts to the human or physical environment.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

PART IV. NARRATIVE EVALUATION AND COMMENT

The management changes discussed in this amendment to the 2000 Lewis and Clark Cavern State Park Management Plan have been proposed because FWP feels that the public would be best served by their implementation. The issues that have been discussed in this EA amendment proposal have arisen largely because of repeated requests from the public and/or use patterns that point to specific needs that are not being adequately met by the current PMP. Also, changing demographics require a corresponding change in services and programs that parks provide.

Development of Trails in Primitive Areas of the Park

The increase in Park trail opportunities has been cited as a very high priority issue through the various visitor surveys and public hearings conducted as part of the management planning process. The majority of any new trails in the western or 'primitive' sections of the Park would be in forested terrain which would not be in view of other trails and would offer users the solitary experience they desire. More trail miles would disperse trail users and help protect the resource as well as offering users more of a wilderness experience.

Mountain Bike use in the Park

Shared use trails are the most efficient use of agency resources and help build a larger community of Park supporters. Very few complaints have been received regarding mountain bike use of the trails, and FWP has received numerous enthusiastic letters and e-mails in support of more bicycle opportunities in the Park. While some amount of damage to trails in the Park has been observed, it has not been severe. Both hiking and mountain bike use of the trail system impacts the physical structure of the trail and requires periodic maintenance. Part of the responsibility of having a trail system is planning for such necessary maintenance which is a scheduled activity for Park staff. An array of mitigation measures are available to help avoid or counteract damage to trails, and a local bicycle club has offered to help design more durable, safer trails as well as help with maintenance.

Campground Development

An upgraded campground with more options for overnight facilities would help serve visitors to LCCSP, especially the elderly and those with health problems. Such improvements would also attract more visitors to the Park and surrounding area which would fulfill the Park's mission statement and also bring more revenue to local businesses.

The proposed management changes would increase recreational opportunities in Lewis and Clark Caverns State Park, help form valuable partnerships with young adults in the area, and are unlikely to cause any significant impacts to the human or physical environment. Any future development referred to in this amendment would be analyzed in a separate EA, and specific impacts would be discussed more thoroughly at that time.

PART V. PUBLIC PARTICIPATION

- 1. Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?**

During the development of the Park's 10-year management plan, public input was sought through visitor surveys and comments. Based upon the input received, there appeared to be a high level of support for an expanded trail system, especially in the non-developed western portion of the Park's property. There has been an equal amount of interest in increased bicycling opportunities within the Park with numerous individuals and one bicycle club sending in written comments in support of such use.

The public will be notified by way of one statewide press release, legal notices in the *Helena Independent Record*, the *Montana Standard*, the *Bozeman Chronicle*, and by public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov/publicnotices>. Individual notices will be sent to the region's standard EA distribution list and to those that have requested one.

Duration of comment period:

A 30-day comment period is proposed. This level of public involvement is appropriate for this scale of project.

Comments should be sent to:

Lynette Kemp or
Park Manager

PO Box 489
Whitehall, MT 59759
kempcaverns@in-tch.com
(406)287-3541

Linnaea Schroeer-Smith
Independent Contractor
(Borealis Technical Writing)
1027 9th Ave
Helena, MT 59601
mtflower3@bresnan.net
(406)495-9620

PART VI. EA PREPARATION

- 1. Based on the significance criteria evaluated in this EA, is an EIS required? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.**

Based on an evaluation of the primary, secondary, and cumulative impacts to the physical and human environment under the Montana Environmental Protection Act (MEPA), this environmental review found no significant impacts from the proposed Park Management Plan Amendment. In determining the significance of the impacts, FWP assessed the severity, duration, geographic extent, and frequency of the impact, the probability that the impact would occur or reasonable assurance that the impact would not occur, growth-inducing or growth inhibiting aspects of the impact, the importance to the state and to society of the environmental resource or value affected, and precedent that would be set as a result of the proposed action that would commit FWP to future actions; and potential conflicts with local, federal, or state laws. Therefore, an EA is the appropriate level of review, and an EIS is not required.

- 2. Name, title, address and phone number of the person(s) responsible for preparing the EA:**

Jerry Walker	Lynette Kemp	Linnaea Schroeer-Smith
Regional Parks Manager	Park Manager	Independent Contractor
1400 South 19 th Ave	PO Box 489	1027 9 th Ave
Bozeman, MT 59717	Whitehall, MT 59759	Helena, MT 59601
(406) 994-3552	(406)287-3541	(406)495-9620
gwalker@mt.gov	kempcaverns@in-tch.com	mtflower3@bresnan.net

- 3. List of agencies consulted during preparation of the EA:**

Montana Fish, Wildlife & Parks
Parks Division
Wildlife Division
Fisheries Division
Design & Construction Bureau
Lands Division
Legal Unit
Montana Department of Commerce – Tourism
Montana Natural Heritage Program – Natural Resources Information System (NRIS)

APPENDIX 1

Sensitive Plants and Animals in the Lewis and Clark Caverns State Park area.

A search of the Montana Natural Heritage Program (MNHP) element occurrence database (nhp.nris.state.mt.us/eoportal) indicates no known occurrences of federally listed threatened, endangered, or proposed threatened or endangered plant or animal species in the proposed project site.

Species of Concern Terms and Definitions

Montana Species of Concern. The term "**Species of Concern**" includes taxa that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss, and/or other factors. The term also encompasses species that have a special designation by organizations or land management agencies in Montana including the Bureau of Land Management Special Status and Watch species, U.S. Forest Service Sensitive and Watch species, and U.S. Fish and Wildlife Service Threatened, Endangered and Candidate species.

▼ **Status Ranks (Global and State)**

The international network of Natural Heritage Programs employs a standardized ranking system to denote global (**G** -- range-wide) and state status (**S**) (NatureServe 2003). Species are assigned numeric ranks ranging from 1 (critically imperiled) to 5 (demonstrably secure), reflecting the relative degree to which they are "at-risk". Rank definitions are given below. A number of factors are considered in assigning ranks -- the number, size and distribution of known "occurrences" or populations, population trends (if known), habitat sensitivity, and threat. Factors in a species' life history that make it especially vulnerable are also considered (e.g., dependence on a specific pollinator).

Status Ranks

Code	Definition
G1 S1	At high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
G2 S2	At risk because of very limited and/or declining numbers, range, and/or habitat, making it vulnerable to global extinction or extirpation in the state.
G3 S3	Potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas.
G4 S4	Uncommon but not rare (although it may be rare in parts of its range), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern.
G5 S5	Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.

1. *Oncopodura cruciata* (springtail)

State: **S1S2**

Global: **G1G2**

U.S. Fish and Wildlife Service:

U.S. Forest Service:

U.S. Bureau of Land Management:

It is unlikely that the possible changes proposed in this Park Management Plan Amendment would affect this invertebrate animal. However, any new development would be analyzed in a separate EA and possible impacts would be thoroughly discussed at that time.

2. *Great Blue Heron Rookery*

Natural Heritage Ranks:

State: **SNR**

Global: **GNR**

Federal Agency Status:

U.S. Fish and Wildlife Service:

U.S. Forest Service:

U.S. Bureau of Land Management:

It is unlikely that the possible changes proposed in this Park Management Plan Amendment would affect this species. However, any new development would be analyzed in a separate EA and possible impacts would be thoroughly discussed at that time.

3. *Corynorhinus townsendii* (Townsend's Big-Eared Bat).

Natural Heritage Ranks:

State: **S2**

Global: **G4**

Federal Agency Status:

U.S. Fish and Wildlife Service:

U.S. Forest Service: **Sensitive**

U.S. Bureau of Land Management: **Sensitive**

It is unlikely that the possible changes proposed in this Park Management Plan Amendment would affect this species. However, any new development would be analyzed in a separate EA and possible impacts would be thoroughly discussed at that time.

4. *Cryptobunus cavicolus* (Cave Obligate Harvestman).

Natural Heritage Ranks:

State: **S1S2**

Global: **G1G2**

Federal Agency Status:

U.S. Fish and Wildlife Service:

U.S. Forest Service:

U.S. Bureau of Land Management:

It is unlikely that the possible changes proposed in this Park Management Plan Amendment would affect this cave-dwelling invertebrate animal. However, any new development would be analyzed in a separate EA and possible impacts would be thoroughly discussed at that time.

5. *Myotis thysanodes* (Fringed Myotis).

Natural Heritage Ranks:

State: **S3**

Global: **G4G5**

Federal Agency Status:

U.S. Fish and Wildlife Service:

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

It is unlikely that the possible changes proposed in this Park Management Plan Amendment would affect this species. However, any new development would be analyzed in a separate EA and possible impacts would be thoroughly discussed at that time.

Interested parties may contact MFWP Region 2 offices for a detailed map of sensitive species Element Occurrences (EOs).

Information courtesy of Montana Natural Heritage Program.

Appendix 2

The Lewis and Clark Caverns Mission Statement

Lewis and Clark Caverns State Park provides for the preservation and protection of the underground environment and above ground ecosystem, and through its interpretive programs and recreational facilities, provides visitors with the opportunity to learn about the area's unique natural and historic resources.

Ten Year Vision

Within ten years, Lewis and Clark Caverns State Park will provide an expanded range of recreational opportunities including trail and river-related activities. The experience of Park visitors will be improved by focusing on quality visitor services and facilities, enhanced interpretive programs, and elevated resource protection efforts. Educational opportunities for children will be emphasized by continuing to provide educational trunks to school throughout the state and facilitating school group tours of the cave system and park. Visitor satisfaction will be monitored using on-site surveys throughout the ten-year period to ensure a quality experience is being provided.

The Park will increase its importance as a destination tourist attraction, encouraging visitors to stay longer and visit other attractions in the area. The rustic character of existing facilities and the Park as a whole will be maintained by concentrating new facilities within the existing developed areas of the Park. The 1930s era appearance of the Park will be perpetuated to the greatest extent possible; design themes from this period should be integrated into any major new construction.

The Park will continue to promote a positive, cooperative, and open dialogue with adjacent landowners and local businesses on such issues as tourism, weed control, hunting, game damage, and illegal trespass. The plant ecosystem in the Park will be sustainable with minimal impact by exotic noxious weeds. Employee and visitor safety will be primary emphasis areas. The Park will strive to keep pace with increased visitation and use by continually evaluating daily operations, staff scheduling, and concessions, making adjustments when required. Requests for increased operations and maintenance budgets and additional staffing will be based solely on maintaining and enhancing Park resources and facilities, providing a quality visitor experience, and ensuring visitor and employee safety.